

What Is Claimed Is:

1. An afterburner (1), in particular for chemical reformers intended for procurement of hydrogen, for afterburning residual gases from a reforming and/or fuel cell process, having at least one nozzle (2) to meter fuel and combustible residual gases into a combustion chamber (8) and at least one air supply (3), wherein the combustion chamber (8) is at least partially filled with a heat-resistant, open-pore ceramic foam (4).
2. The afterburner as recited in Claim 1, wherein the ceramic foam (4) composed at least partially of silicon carbide.
3. The afterburner as recited in Claim 1 or 2, wherein the ceramic foam (4) is made to have open pores via reticulation.
4. The afterburner as recited in one of the Claims 1 through 3, wherein the ceramic foam (4) can be heated electrically.
5. The afterburner as recited in one of the preceding claims, wherein the ceramic foam (4) is in good heat-conducting contact with at least one part of the wall of the combustion chamber (8).
6. The afterburner as recited in one of the preceding claims, wherein the ceramic foam (4) is covered partially with a catalytic layer, in particular platinum.
7. The afterburner as recited in one of the preceding claims, wherein the afterburner (1) features an ignition device.
8. The afterburner as recited in Claim 7, wherein the ignition device is formed as an electric glow filament (14) or glow plug.

9. The afterburner as recited in Claim 7 or 8,
wherein the ignition device is installed or formed between the ceramic foam (4) and the
nozzle (2) or in the ceramic foam (4).

10. The afterburner as recited in one of the preceding claims,
wherein the nozzle (2) is in the form of a swirl or a multi-orifice nozzle.